UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Rev. 1450

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## NOTICE OF ALLOWANCE AND FEE(S) DUE

43471 7590 11/30/2010

Motorola, Inc. 600 North US Highway 45 W4 - 39Q Libertyville, IL 60048-5343 EXAMINER
TAYONG, HELENE E

PAPER NUMBER

ART UNIT

DATE MAILED: 11/30/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776.982	02/11/2004	David P. Gurney	BCS03463	4523

TITLE OF INVENTION: METHOD AND APPARATUS FOR IMPROVED BURST ACQUISITION IN A DIGITAL RECEIVER

 APPLN. TYPE
 SMALL ENTITY
 ISSUE FEE DUE
 PUBLICATION FEE DUE
 PREV. PAID ISSUE FEE
 TOTAL FEE(S) DUE
 DATE DUE

 nonprovisional
 NO
 \$1510
 \$300
 \$0
 \$1810
 02/28/2011

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless corrects maintenance fee notifica	correspondence includir ed below or directed oth	ng the Patent, advance on herwise in Block 1, by (a	rders and notification of n a) specifying a new corres	naintenance fees wi pondence address;	Il be mailed to i and/or (b) indica	the current conting a separa	orrespondence address as ite "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
43471 Motorola, Inc. 600 North US H W4 - 39Q Libertyville, IL		/2010	Lhe	Certi	ficate of Mailin	g or Transm	
Libertyville, iL	00048-3343						(Depositor's name)
			<u> </u>				(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTORNEY DOC	KET NO.	CONFIRMATION NO.
10/776,982 TITLE OF INVENTION	02/11/2004 I: METHOD AND APPA	ARATUS FOR IMPROVI	David P. Gurney ED BURST ACQUISITION	N IN A DIGITAL R	BCS0346 ECEIVER	53	4523
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE TOTAL I	EE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$0 \$1810		02/28/2011
EXAM	IINER	ART UNIT	CLASS-SUBCLASS				
TAYONG,	HELENE E	2611	375-324000				
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required.  3. ASSIGNEE NAME A	ondence address (or Cha 3/122) attached. ication (or "Fee Address 12 or more recent) attach ND RESIDENCE DAT2 less an assignee is ident h in 37 CFR 3.11. Comp	nge of Correspondence  Indication form ed. Use of a Customer  A TO BE PRINTED ON 2	2. For printing on the p (1) the names of up to or agents OR, alternativ (2) the name of a single registered attorney or a 2 registered patent atto listed, no name will be THE PATENT (print or typ data will appear on the p T (3) RESIDENCE: (CITY)	3 registered patent vely, e firm (having as a sigent) and the names meys or agents. If no printed.	member a 2_ s of up to o name is 3_ e is identified be	elow, the doc	ument has been filed for
Please check the appropr	iate assignee category or	categories (will not be pr	inted on the patent):	Individual 🚨 Cor	poration or other	private grou	pentity Government
4a. The following fee(s) are submitted:    Issue Fee   A check is enclosed.     Publication Fee (No small entity discount permitted)     Advance Order - # of Copies     The following fee(s) are submitted:   Depriment of Fee(s): (Please first reapply any previously paid issue fee shown above)     A check is enclosed.     Payment by credit card. Form PTO-2038 is attached.     The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Depoint Account Number (enclose an extra copy) of his fi							
	s SMALL ENTITY state	is. See 37 CFR 1.27.	☐ b. Applicant is no long				
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	uired) will not be accepted tes Patent and Trademark	d from anyone other than to Office.	he applicant; a regist	ered attorney or	agent; or the	assignee or other party in
Authorized Signature				Date			
Typed or printed name			Registration No.				
This collection of inform an application. Confiden submitting the complete this form and/or suggests Box 1450, Alexandria, V Alexandria, Virginia 223	nation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this but 'irginia 22313-1450. DC k13-1450.	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the ONOT SEND FEES OR (	on is required to obtain or r 1.14. This collection is est depending upon the indiv e Chief Information Office COMPLETED FORMS TO	etain a benefit by the imated to take 12 m idual case. Any con rr, U.S. Patent and T D'THIS ADDRESS.	e public which is inutes to comple ments on the an rademark Office SEND TO: Con	to file (and bete, including mount of time to U.S. Depart missioner fo	by the USPTO to process) gathering, preparing, and you require to complete ment of Commerce, P.O. r Patents, P.O. Box 1450,

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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



# UNITED STATES PATENT AND TRADEMARK OFFICE

#### UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

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10/776,982		02/11/2004	David P. Gurney	BCS03463 4523	
43471	7590	11/30/2010		EXAM	UNER
Motorola, Inc.		TAYONG, HELENE E			
600 North US Highway 45			ART UNIT	PAPER NUMBER	
W4 - 39Q Libertyville, IL 60048-5343			2611 DATE MAILED: 11/30/2010		

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 585 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 585 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

# Notice of Allowability

Application No.	Applicant(s)		
10/776,982	GURNEY ET AL.		
Examiner	Art Unit		
HELENE TAYONG	2611		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF ATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.33 and MPEP 1308.

- This communication is responsive to 11/09/10.
- The allowed claim(s) is/are 1-4,6,8-11,14,16,17,19-22,25 and 27.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All b) Some\* c) None of the:
    - 1. Certified copies of the priority documents have been received.
    - 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
    - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date \_\_\_\_\_
  - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying Indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

 DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

# Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2. 
  Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3. Information Disclosure Statements (PTO/SB/08),
- Paper No./Mail Date
- Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date .
- 7. Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. 🔲 Other \_\_\_\_

Application/Control Number: 10/776,982

Art Unit: 2611

### DETAILED ACTION

Acknowledgement is made of amendment filed on 11/09/10.
 Claims 1-4,6,8-11,14,16-17,19-22,25 and 27 are currently pending in this application and have been considered below.

# Response to Arguments

 Applicant's arguments with respect to the rejection of Claims 11,22 and 27 under 35 U.S.C. 103(a) as being unpatentable over Labedz et al (US 4847869) in view of Rostany et al (US 5970399) have been fully considered and are persuasive. The rejection of Claims 11, 22 and 27 has been withdrawn.

# Allowable Subject Matter

- 3. Claims 1-4, 6, 8-11,14,16-17,19-22,25 and 27 are allowed.
- 4. The following is an examiner's statement of reasons for allowance: The prior art of record Labedz et al (US 4847869) and Rostany et al (US 5970399) taken individually or in combination fails to particularly disclose, fairly suggest, or render obvious on the following when considered in combination with other limitations in the claim: estimating a signal energy value over a portion of said signal; comparing said signal energy value to a designated signal energy threshold value; estimating a signal carrier to noise plus interference ratio (CIR) value over the same portion of said signal; comparing said CIR value to a predetermined CIR threshold value; and signaling a valid burst detection if said signal energy value exceeds said predetermined signal energy threshold value for a first predetermined period of time and said CIR value

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simultaneously exceeds said predetermined CIR threshold value for a second predetermined period of time, wherein said first predetermined period of time and said second predetermined period of time comprise a majority of an expected burst duration wherein said predetermined signal energy threshold value comprises a first signal energy threshold that is utilized to detect a presence of said signal if said signal is currently undetected, and a second signal energy threshold that is utilized to detect the absence of said signal if said signal is currently detected, said signal being initially detected if the estimated signal energy exceeds said first signal energy threshold, and said signal becoming subsequently undetected if the estimated signal energy falls below said second signal energy threshold.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

# Conclusion

 The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Mui (US 5425058) discloses MSK phase acquisition and tracking.
 Berezdivin et al (US 20030203721) discloses in figs. 5B and 6 M-ary PSK or M-ary QAM modulation

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HELENE TAYONG whose telephone number is Application/Control Number: 10/776,982

Art Unit: 2611

(571)270-1675. The examiner can normally be reached on Monday-Friday 8:00 am to 5:30 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Liu Shuwang can be reached on 571-272-3036. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Helene Tayong/ Examiner, Art Unit 2611

11/19/10 /Shuwang Liu/ Supervisory Patent Examiner, Art Unit 2611